

Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (previously presented) A method for synchronizing operations in a computer environment with accompanying audio, said method comprising:

- replaying said operations and said accompanying audio in said computer environment using an event recording, said operations resulting from processing of recorded user inputs of said event recording, said event recording including all user inputs to an original computer environment during said event recording and initial conditions of said original computer environment when said event recording was initiated;
- creating a synchronization point at a common point in said replaying of said operations and said accompanying audio;
- associating said synchronization point with said accompanying audio, said synchronization point providing a reference point to substantially synchronize said accompanying audio when said operations are replayed in a replay computer environment using said recorded user inputs;
- detecting said synchronization point during a subsequent replay of said operations and said accompanying audio in said replay computer environment, said subsequent replay involving another processing of said recorded user inputs;
- comparing said synchronization point with a time value associated with said another processing of said recorded user inputs;
- selectively pausing said subsequent replay of said accompanying audio if a difference between said synchronization point and said time value exceeds a predefined amount so that said subsequent replay of said operations can catch up to said accompanying audio; and

24 resuming said subsequent replay of said accompanying audio if a
25 difference between said synchronization point and a current time value does not
26 exceed a second predefined amount, said current time value being associated with
27 said another processing of said recorded user inputs.

1 2. (original) The method of claim 1 wherein said creating of said
2 synchronization point includes creating said synchronization point in response to a
3 user command.

1 3. (original) The method of claim 1 wherein said common point is at a point in
2 time where there is no audio output during said replaying of said accompanying
3 audio.

1 4. (original) The method of claim 1 further comprising obtaining a current time
2 value associated with said processing of said recorded user inputs, said current time
3 value corresponding to said synchronization point.

1 5. (original) The method of claim 1 further comprising saving said
2 synchronization point in a first file containing said accompanying audio, said first file
3 being different than a second file containing said recorded user inputs.

1 6. (original) The method of claim 1 further comprising changing a time value of
2 said synchronization point in response to a positional change of a marker of said
3 synchronization point in a timeline.

1 7. (canceled).

1 8. (canceled).

1 9. (previously presented) The method of claim 1 wherein said second predefined
2 amount equals said predefined amount.

1 10. (previously presented) A method for synchronizing operations in a computer
2 environment with accompanying audio, said method comprising:
3 replaying said operations in said computer environment, including
4 replaying said accompanying audio, using an event recording, said operations
5 resulting from processing of recorded user inputs of said event recording, said event
6 recording including all user inputs to an original computer environment during said
7 event recording and initial conditions of said original computer environment when
8 said event recording was initiated;
9 detecting a synchronization point during said replaying of said
10 accompanying audio;
11 comparing said synchronization point with a time value associated
12 with said processing of said recorded user inputs;
13 selectively pausing said replaying of said accompanying audio if a
14 difference between said synchronization point and said time value exceeds a
15 predefined amount so that said replaying of said operations can catch up to said
16 accompanying audio; and
17 resuming said replaying of said accompanying audio if a difference
18 between said synchronization point and a current time value does not exceed a second
19 predefined amount, said current time value being associated with said processing of
20 said recorded user inputs.

1 11. (canceled).

1 12. (previously presented) The method of claim 10 wherein said second
2 predefined amount equals said predefined amount.

1 13. (original) The method of claim 10 further comprising displaying said
2 synchronization point as a marker on a timeline, said timeline including time values
3 extracted from said recorded user inputs.

1 14. (original) The method of claim 10 further comprising:
2 creating said synchronization point at a common point in a replay of
3 said operations and said accompanying audio; and
4 associating said synchronization point with said accompanying audio.

1 15. (original) The method of claim 14 wherein said creating of said
2 synchronization point includes creating said synchronization point in response to a
3 user command.

1 16. (original) The method of claim 14 wherein said common point is at a point in
2 time where there is no audio output of said accompanying audio.

1 17. (original) The method of claim 14 further comprising saving said
2 synchronization point in a first file containing said accompanying audio, said first file
3 being different than a second file containing said recorded user inputs.

1 18. (original) The method of claim 14 further comprising changing a time value of
2 said synchronization point in response to a positional change of a marker of said
3 synchronization point in a timeline.

1 19. (previously presented) A storage medium readable by a computer, tangibly
2 embodying a program of instructions executable by said computer to perform method
3 steps for synchronizing operations in a computer environment with accompanying
4 audio, said method comprising:
5 replaying said operations and said accompanying audio in said
6 computer environment using an event recording, said operations resulting from

7 processing of recorded user inputs of said event recording, said event recording
8 including all user inputs to an original computer environment during said event
9 recording and initial conditions of said original computer environment when said
10 event recording was initiated;
11 creating a synchronization point at a common point in said replaying
12 of said operations and said accompanying audio; and
13 associating said synchronization point with said accompanying audio,
14 said synchronization point providing a reference point to substantially synchronize
15 said accompanying audio when said operations are replayed in a replay computer
16 environment using said recorded user inputs;
17 detecting said synchronization point during a subsequent replay of said
18 operations and said accompanying audio in said replay computer environment, said
19 subsequent replay involving another processing of said recorded user inputs;
20 comparing said synchronization point with a time value associated
21 with said another processing of said recorded user inputs;
22 selectively pausing said subsequent replay of said accompanying audio
23 if a difference between said synchronization point and said time value exceeds a
24 predefined amount so that said subsequent replay of said operations can catch up to
25 said accompanying audio; and
26 resuming said subsequent replay of said accompanying audio if a
27 difference between said synchronization point and a current time value does not
28 exceed a second predefined amount, said current time value being associated with
29 said another processing of said recorded user inputs.

1 20. (original) The storage medium of claim 19 wherein said creating of said
2 synchronization point includes creating said synchronization point in response to a
3 user command.

1 21. (original) The storage medium of claim 19 wherein said common point is at a
2 point in time where there is no audio output during said replaying of said
3 accompanying audio.

1 22. (original) The storage medium of claim 19, wherein said method further
2 comprises obtaining a current time value associated with said processing of said
3 recorded user inputs, said current time value corresponding to said synchronization
4 point.

1 23. (original) The storage medium of claim 19, wherein said method further
2 comprises saving said synchronization point in a first file containing said
3 accompanying audio, said first file being different than a second file containing said
4 recorded user inputs.

1 24. (original) The storage medium of claim 19, wherein said method further
2 comprises changing a time value of said synchronization point in response to a
3 positional change of a marker of said synchronization point in a timeline.

1 25. (canceled).

1 26. (canceled).

1 27. (previously presented) The storage medium of claim 19 wherein said second
2 predefined amount equals said predefined amount.

1 28. (previously presented) A storage medium readable by a computer, tangibly
2 embodying a program of instructions executable by said computer to perform method
3 steps for synchronizing operations in a computer environment with accompanying
4 audio, said method comprising:

5 replaying said operations in said computer environment, including
6 replaying said accompanying audio, using an event recording, said operations
7 resulting from processing of recorded user inputs of said event recording, said event
8 recording including all user inputs to an original computer environment during said
9 event recording and initial conditions of said original computer environment when
10 said event recording was initiated;
11 detecting a synchronization point during said replaying of said
12 accompanying audio;
13 comparing said synchronization point with a time value associated
14 with said processing of said recorded user inputs;
15 selectively pausing said replaying of said accompanying audio if a
16 difference between said synchronization point and said time value exceeds a
17 predefined amount so that said replaying of said operations can catch up to said
18 accompanying audio; and
19 resuming said replaying of said accompanying audio if a difference
20 between said synchronization point and a current time value does not exceed a second
21 predefined amount, said current time value being associated with said processing of
22 said recorded user inputs.

1 29. (canceled).

1 30. (previously presented) The storage medium of claim 28 wherein said second
2 predefined amount equals said predefined amount.

1 31. (original) The storage medium of claim 28 further comprising displaying said
2 synchronization point as a marker on a timeline, said timeline including time values
3 extracted from said recorded user inputs.

1 32. (original) The storage medium of claim 28 wherein said method further
2 comprises:

3 creating said synchronization point at a common point in a replay of
4 said operations and said accompanying audio; and
5 associating said synchronization point with said accompanying audio.

1 33. (original) The storage medium of claim 32 wherein said method further
2 comprises wherein said creating of said synchronization point includes creating said
3 synchronization point in response to a user command.

1 34. (original) The storage medium of claim 32 wherein said common point is at a
2 point in time where there is no audio output of said accompanying audio.

1 35. (original) The storage medium of claim 32 further comprising saving said
2 synchronization point in a first file containing said accompanying audio, said first file
3 being different than a second file containing said recorded user inputs.

1 36. (original) The storage medium of claim 32 further comprising changing a time
2 value of said synchronization point in response to a positional change of a marker of
3 said synchronization point in a timeline.

1 37. (previously presented) A method for synchronizing operations in a computer
2 environment with accompanying audio, said method comprising:
3 replaying said operations in said computer environment, including
4 replaying said accompanying audio, using an event recording, said operations
5 resulting from processing of recorded user inputs of said event recording, said event
6 recording including all user inputs to an original computer environment during said
7 event recording and initial conditions of said original computer environment when
8 said event recording was initiated;
9 detecting a synchronization point during said replaying of said
10 accompanying audio;

11 comparing said synchronization point with a time value associated
12 with said processing of said recorded user inputs;
13 selectively pausing said replaying of said accompanying audio if a
14 difference between said synchronization point and said time value exceeds a
15 predefined amount so that said replaying of said operations can catch up to said
16 accompanying audio;
17 creating said synchronization point at a common point in a replay of
18 said operations and said accompanying audio, wherein said common point is at a
19 point in time where there is no audio output of said accompanying audio; and
20 associating said synchronization point with said accompanying audio.

1 38. (previously presented) A storage medium readable by a computer, tangibly
2 embodying a program of instructions executable by said computer to perform said
3 method of claim 37.

1 39. (previously presented) A method for synchronizing operations in a computer
2 environment with accompanying audio, said method comprising:
3 replaying said operations in said computer environment, including
4 replaying said accompanying audio, using an event recording, said operations
5 resulting from processing of recorded user inputs of said event recording, said event
6 recording including all user inputs to an original computer environment during said
7 event recording and initial conditions of said original computer environment when
8 said event recording was initiated;
9 detecting a synchronization point during said replaying of said
10 accompanying audio;
11 comparing said synchronization point with a time value associated
12 with said processing of said recorded user inputs;
13 selectively pausing said replaying of said accompanying audio if a
14 difference between said synchronization point and said time value exceeds a

15 predefined amount so that said replaying of said operations can catch up to said
16 accompanying audio;
17 creating said synchronization point at a common point in a replay of
18 said operations and said accompanying audio;
19 associating said synchronization point with said accompanying audio;
20 and
21 saving said synchronization point in a first file containing said
22 accompanying audio, said first file being different than a second file containing said
23 recorded user inputs.

1 40. (previously presented) A storage medium readable by a computer, tangibly
2 embodying a program of instructions executable by said computer to perform said
3 method of claim 39.

1 41. (previously presented) The method of claim 1, further comprising:
2 saving said initial conditions of said original computer environment in a log
3 file when a recording is initiated, said initial conditions corresponding to an initial
4 state of said original computer environment such that said initial state of said original
5 computer environment can be automatically recreated on replay using said initial
6 conditions, said initial state being a particular state from a plurality of possible states
7 for said original computer environment, said log file including complete definitions of
8 every control in said original computer environment with respect to said initial state
9 so that said initial state can be subsequently recreated using said log file;
10 modifying said initial conditions in said log file in response to user
11 editing of said log file so that a modified initial state of said original computer
12 environment is automatically created on replay using modified initial conditions in
13 said log file when said log file is loaded; and
14 automatically loading said log file in said computer environment when
15 a replay is initiated to create said modified initial state in said computer environment
16 as a starting state for said replay.

1 42. (previously presented) The method of claim 10, further comprising:
2 saving said initial conditions of said original computer environment in a log
3 file when a recording is initiated, said initial conditions corresponding to an initial
4 state of said original computer environment such that said initial state of said original
5 computer environment can be automatically recreated on replay using said initial
6 conditions, said initial state being a particular state from a plurality of possible states
7 for said original computer environment, said log file including complete definitions of
8 every control in said original computer environment with respect to said initial state
9 so that said initial state can be subsequently recreated using said log file;
10 modifying said initial conditions in said log file in response to user
11 editing of said log file so that a modified initial state of said original computer
12 environment is automatically created on replay using modified initial conditions in
13 said log file when said log file is loaded; and
14 automatically loading said log file in said computer environment when
15 a replay is initiated to create said modified initial state in said computer environment
16 as a starting state for said replay.

1 43. (previously presented) The storage medium of claim 19, wherein said method
2 steps further comprises:
3 saving said initial conditions of said original computer environment in a log
4 file when a recording is initiated, said initial conditions corresponding to an initial
5 state of said original computer environment such that said initial state of said original
6 computer environment can be automatically recreated on replay using said initial
7 conditions, said initial state being a particular state from a plurality of possible states
8 for said original computer environment, said log file including complete definitions of
9 every control in said original computer environment with respect to said initial state
10 so that said initial state can be subsequently recreated using said log file;
11 modifying said initial conditions in said log file in response to user
12 editing of said log file so that a modified initial state of said original computer

13 environment is automatically created on replay using modified initial conditions in
14 said log file when said log file is loaded; and
15 automatically loading said log file in said computer environment when
16 a replay is initiated to create said modified initial state in said computer environment
17 as a starting state for said replay.